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EXAMINER	
NADAV, ORI	

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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JUSTIN K. BRASK,
MARK L. DOCZY, and
JOHN P. BARNAK

Appeal 2008-0870
Application 10/626,336
Technology Center 2800

Decided: March 14, 2008

Before BRADLEY R. GARRIS, PETER F. KRATZ, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

1This is a decision on an appeal from the Examiner's final rejection of claims 7 and 9-13, the only claims that remain pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 6.

Appellants' invention is directed to a method of forming a metallic oxide on a semiconductor substrate using a liquid oxidizer. Claim 7 is illustrative and reproduced below:

7. A method comprising:

forming a metallic precursor directly on a semiconductor substrate; and
oxidizing said metallic precursor using a liquid oxidizer
.

The Examiner relies on the following prior art references as evidence in rejecting the appealed claims:

Tsuzumitani	6,645,807 B2	Nov. 11, 2003
Hwu	6,887,310 B2	May 3, 2005

Claims 7 and 9-12 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hwu. Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hwu in view of Tsuzumitani.

We affirm both of the stated rejections for the reasons set forth by the Examiner in the Answer and as further discussed below.

Concerning the anticipation rejection, Appellants argue the rejected claims together as a group (Br. 9). Accordingly, we select claim 7 as the representative claim on which we decide this appeal as to the § 102(e) rejection.

As correctly found by the Examiner, Hwu describes a method that includes forming a metallic precursor on a semiconductor substrate and oxidizing the metallic precursor using an electrolyte, such as water, as a liquid oxidizer/electrolyte in a liquid phase anodic oxidation of the metal (Ans. 4; Hwu, Abstract, col. 2, ll. 25-35, col. 3, Embodiments 1 and 2).

Appellants maintain that Hwu employs electricity, including an electrical current and an electrolyte, to effect the oxidation therein and does not describe the use of a liquid oxidizer, as here-claimed (Br. 9; Reply Br. 1-2). In support, Appellants cite to the McGraw-Hill Dictionary of Scientific and Technical Terms for definitions of electrolyte, anodic reaction, electrolysis, and oxidizing agent.

Like the Examiner (Ans. 4-6), however, we are not persuaded by Appellants' argument and furnished definitions.[1] In this regard, we note that representative claim 1 employs open "comprising" language and does not preclude the use of electricity or an electric current in effecting the called for oxidation. Moreover, the subject Specification does not furnish a specific definition for the term "liquid oxidizer" that would preclude a liquid electrolyte, such as the water described by Hwu, from serving this oxidative function in addition to functioning as an electrolyte. In this regard, we note the Examiner's finding concerning drawing Fig. 2 of Hwu describing or depicting the liquid electrolyte as including ions that would be expected to have an oxidizing characteristic or property (Ans. 6).

Here, Appellants' argument and evidence fall short in rebutting the Examiner's reasonably established factual findings and ultimate determination that the liquid electrolyte described by Hwu serves as a liquid oxidizer, as is broadly called for in representative claim 7. Thus, we affirm the Examiner's anticipation rejection.

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[1] Indeed, we note that the pages of the McGraw-Hill Dictionary of Scientific and Technical Terms cited and made of record by Appellant presents definitions of anodized aluminum, oxidate, and oxidized zone that ascribe an oxidizing function to aqueous electrolytes or water that undercuts Appellant's unsupported contention that "there is no substance that oxidizes anything" described in Hwu (Reply Br. 1).

Concerning the Examiner's § 103(a) rejection of dependent claim 13, we note that Appellants do not even address, much less persuasively so, the Examiner's reliance on the teachings of Tsuzumitani in addition to Hwu (Ans. 4; Br. 10). In this regard, we note that Tsuzumitani discloses that "besides pure water, it is also possible to use hydrogen peroxide (H_2O_2) water or ozone (O_3) water or the like as the liquid for oxidizing the metal layer" (col. 7, ll. 42-45).

On this record, we shall also affirm the obviousness rejection of dependent claim 13 for the reasons set forth in the Examiner's Answer.

CONCLUSION

The decision of the Examiner to reject claims 7 and 9-12 under 35 U.S.C. § 102(e) as being anticipated by Hwu; and to reject claim 13 under 35 U.S.C. § 103(a) as being unpatentable over Hwu in view of Tsuzumitani is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

tf/ls

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